#### DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 99.28

## WELDING INSPECTION REPORT

Resident Engineer: Siegenthaler, Peter **Report No:** WIR-020519 Address: 333 Burma Road **Date Inspected:** 12-Dec-2010

City: Oakland, CA 94607

**OSM Arrival Time:** 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1900 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC) Chanxing Island **Location:** Shanghai, China

**CWI Name:** Mr. ZHU ZHONG HAI **CWI Present:** Yes No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No Yes No N/A **Delayed / Cancelled:** 

**Bridge No:** 34-0006 **Component: OBG** Segment

#### **Summary of Items Observed:**

On this date CALTRANS OSM Quality Assurance (QA) Inspector Santhosh Ramakrishna was present during the times noted above for observations relative to fabrication work of the Self Anchored Suspension (SAS) Superstructure being performed.

This QA inspector randomly observed the following work:

## 1. INPROCESS:

Orthotropic Box Girder (OBG) at Trial Assembly Area:

ZPMC welding personnel performing Flux Core Arc Welding (FCAW) of Complete Joint Penetration (CJP) welds joining the T-Rib web to web weld joint for bottom plate located on 12AE+12BE. The weld is designated as BP3002-001-038. The welder is identified as 040367. ZPMC QC Mr. AN QING XING was onsite monitoring the welding variables. The inprocess FCAW appears to be progressing in compliance with WPS-B-T-2231-B-U2-F.

ZPMC welding personnel performing Shielded Metal Arc Welding (SMAW) of Repair weld for the T-Rib clip to T-rip weld joint for side plate located on 12BW at cross beam side, Panel Point (PP-114). The weld is designated as SEG3005E-090~095. The welder is identified as 045268. ZPMC QC Mr. ZHANG QIANG was onsite monitoring the welding variables. The inprocess SMAW appears to be progressing in compliance with WPS-345-SMAW-2G (2F)-FCM-Repair-1. The weld repair report number is named as WR-16209. Further weld detail mention in attached picture.

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ZPMC welding personnel performing Shielded Metal Arc Welding (SMAW) of Repair weld for the edge plate to deck plate weld joint located on 11DW at cross beam side, Panel Point between (PP-104 & 104.5). The weld is designated as SEG071\*-045. The welder is identified as 045268. ZPMC QC Mr. ZHANG QIANG was onsite monitoring the welding variables. The inprocess SMAW appears to be progressing in compliance with WPS-345-SMAW-4G (4F)-FCM-Repair-1. The weld repair report number is named as WR-18867. Further weld detail mention in attached picture.

## 2. NDT:

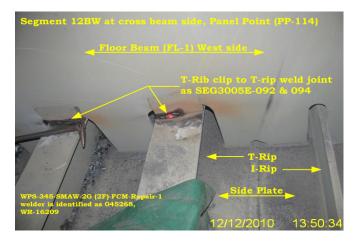
Ultrasonic Testing (UT):

UT carried out as per the ZPMC submitted Notification No 07749.

This QA Inspector performed Ultrasonic Testing (UT) on approximately 10 % of CJP welds that has been previously tested and accepted by ZMPC ultrasonic technicians in accordance with AWS D1.5-2002, section 6, table 6.3. This QA inspector generated a (UT) (TL-6027) report for this date. The QA Inspector generated a TL-6027 UT report on this date. Weld identification numbers were SSD25-PP105-032, SSD25-PP105-047, SSD25-PP105-103, SSD25-PP105-104, SSD25-PP105-100, SSD25-PP105-117, SSD25-PP105-137, SSD25-PP105-174 & SSD25-PP105-223.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.





## **Summary of Conversations:**

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No relevant conversations were reported on this date.

## **Comments**

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang 150-0042-2372, who represents the Office of Structural Materials for your project.

Inspected By:	Pillai,Santosh	Quality Assurance Inspector
Reviewed By:	Miller,Mark	QA Reviewer